NORTH PACIFIC OCEAN, MAY 1937

By WILLIS E. HURD

Atmospheric pressure.—The Aleutian Low was more firmly established over the extreme northern waters of the North Pacific Ocean in May 1937, than during any previous month of the year: at Dutch Harbor the average pressure, 29.59 inches, was 0.25 inch below the normal for the month. Barometer readings below 29 inches were observed on several days over the central and western parts of the northern routes, the American steamer General Pershing reporting a reading of 28.73 on the 5th near 50° N., 178° W. However, the lowest reading of the month, 28.56, reported by the American steamer President Jackson on the 10th near 51° N., 138° W., was in a region much less frequented by deep cyclonic storms this month than were the higher latitudes from midocean westward.

High pressure prevailed from the northwest coast of the United States over a considerable region southwestward to the Hawaiian Islands and thence westward into East longitudes. In this region Midway Island had an average barometer of 30.14, which is 0.09 inch above the normal of the month.

Table 1.—Averages, departures, and extremes of atmospheric pressure at sea level, North Pacific Ocean, May 1937, at selected stations

Station	Aver- age pres- sure	Departure from normal	Highest	Date	Lowest	Date
Point Barrow Dutch Harbor St. Paul Kodiak Juneau Tatoosh Island San Francisco Mazatlan Honolulu Midway Island Guam Manila Hong Kong Nemuro ¹	29. 71 29. 94 30. 07	Inch -0.1625201305 +.0603 .00 +.01 +.09 .00	Inches 30. 22 30. 50 30. 18 30. 34 30. 34 30. 44 30. 23 29. 96 30. 16 30. 28 29. 92 29. 92	6 1 1 1 5 4 4 7 10 8 14, 15 21, 24, 28 24, 28 3	Inches 29. 62 28. 96 29. 98 29. 36 29. 26 62 29. 71 29. 74 29. 87 30. 00 } 29. 83 29. 71 29. 64	30 24 17 11, 24, 25 10 16 29 26 2 2 3, 5, 12, 31 31 13

¹ Data incomplete.

Note.—Data based on 1 daily observation only, except those for Juneau, Tatoosh Island, San Francisco, and Honolulu, which are based on 2 observations. Departures are computed from best available normals related to time of observation.

Cyclones and gales.—Most of the cyclonic activity this month was of the Aleutian Low type with deep and well-developed centers frequently appearing in upper-central and western waters, and much less frequently over the northeastern part of the ocean. The greater part of the month's storminess was therefore experienced by vessels over the western two-thirds of the northern and central routes. Most extratropical gales reported were of forces 8–9, but on three dates winds of force 10 were encountered, and on one date a northwesterly gale of force 11 occurred. This was reported on the 18th near 42° N., 164° E., by the American steamer Golden Tide.

During the first 4 days of May a cyclone lay over extreme northwestern waters and was the cause of fresh gales off the east coast of Japan. The disturbance moved rapidly eastward on the 5th, carrying low pressures and fresh to strong gales over a great expanse of ocean in the vicinity of the Aleutian Islands.

On the 8th and 9th another deep Low spread over Aleutian waters, whence it moved with great rapidity into the Gulf of Alaska, where, on the 10th, the steamship President Jackson had a force-10 gale near 51° N., 138° W., with the low barometer previously referred to.

Subsequently, with the fluctuations of the Aleutian cyclone, stormy conditions continued intermittently in northern waters until the end of the month, and are best shown by the table of gales.

In eastern Japanese waters gales were reported on the 2d, 3d, 19th, and 22d; in middle California waters, on the 5th and 6th.

The New York Maritime Register and press reports state that the British steamship City of Singapore, which left Los Angeles for Manila on May 9, returned to port late on the following day in a battered condition and with 20 injured seamen, the result of a sudden encounter with a storm of hurricane force a few hours out from harbor. Ship weather reports available at the present time do not show this storm, and it must have been of local character.

Tropical cyclone off the Pacific Mexican coast.—A small but violent cyclone occurred off the coast of Mexico to the southward of Acapulco on May 25. So far as at present reported, most if not all the rough weather in connection with it was confined to the area lying between the coast and latitude 15° N. and between the ninety-eighth and one-hundred and first meridians.

At the morning observation of May 25 the American steamers *Indianan* and *Susan V. Luckenbach* reported moderate gales (force 7), the former from northeast, in 15°54′ N., 99°24′ W., barometer 29.63; the latter from east-southeast, in 16°05′ N., 99°00′ W., barometer 29.75. The highest wind reported by these ships was of force 9, encountered by the *Indianan* shortly after local noon, a little distance to the northward of her earlier position.

The northbound Norwegian steamship Kattegat, as noted in a special report from the ship, was in heavy rain to "blinding rainsqualls" from 8 a. m. to 12 noon (local), with southeast to south-southwest wind, force 4-5. Her noon position was in 15°59′ N., 99°04′ W. At 3 p. m. she was struck by a heavy and damaging sea, and 10 minutes later was hove to south for bare steering speed into the wind. At 4 p. m. the wind was south, force 9-10, with "sea mounting tremendously." From 5 to 6 p. m. the gale was at its worst, with hurricane squalls from from southeast, heavy rain, and no visibility "sea sweeping over the ship." At 8 p. m. the winds were decreasing, though still of gale force; at 11 p. m. the ship put back on her course.

Mr. E. I. Croft, observing officer on the steamship Antigua which at local noon was south of Cape Corrientes, reporting on the weather messages picked up by radio during the 25th, said the storm apparently moved northward directly upon Acapulco, which it struck late in the afternoon. The Panama Pacific liner Virginia, according to Mr. Croft, encountered southwest winds of force 10–11 outside of Acapulco at 5 p. m. and, unable to make port in the heavy weather which threatened to break her, put back to sea.

The storm went inland during the late afternoon or early night. It appeared thereafter to have crossed southern Mexico, as on the evening of the 26th and the morning of the 27th a depression appeared over the southwestern Gulf of Mexico, with lowest barometer at or near Veracruz.

Fog.—Widely-scattered fogs were reported along the northern steamship routes on 12 days; along the middle routes, between 30°-40° N., 175° W.-145° E., on 11 days; off the China coast on 4 days; off the California coast on 4 days; and off Lower California on 7 days.